



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/755,047	01/08/2001	Takuji Goda	K-1951	6751
32628	7590	01/30/2006	EXAMINER	
KANESAKA BERNER AND PARTNERS LLP SUITE 300, 1700 DIAGONAL RD ALEXANDRIA, VA 22314-2848			PIZIALI, ANDREW T	
			ART UNIT	PAPER NUMBER
			1771	
DATE MAILED: 01/30/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/755,047

Applicant(s)

GODA ET AL.

Examiner

Andrew T. Piziali

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Decision Rendered

1. In view of the reversal by the Board of Patent Appeals and Interferences filed on 8/23/2005, and in view of the results of an updated search, the finality of the Office Action mailed on 5/1/2003 is withdrawn and prosecution is hereby reopened.

Claim Objections

2. Claim 10 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. Language other than closed language, as defined in the MPEP, is treated as open claim language. Therefore, considering that claim 8 already establishes that the barrier film is mainly formed of at least one of indium oxide or tin oxide, claim 10 fails to further limit claim 8.

Claim Rejections - 35 USC § 102/103

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1771

5. Claims 8 and 10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over USPN 4,504,109 to Taga et al. (hereinafter referred to as Taga).

Regarding claims 8 and 10, Taga discloses an article (see Figure 1) comprising an alkali-containing glass substrate (10), an under layer (first layer 30) for preventing diffusion of alkali ions formed on a surface of the alkali-containing glass substrate, a barrier layer (first layer 20) mainly formed of tin oxide (ITO) deposited on the under layer, an insulating film (second layer 30) deposited on the barrier film, and an electrode film (second layer 20) deposited on the insulating film (see entire document including Figure 1, column 2, line 59 through column 3, line 34, and column 5, lines 41-56).

It is noted that Taga specifically discloses that the under layer (first layer 30) is capable of preventing diffusion of alkali ions formed on a surface of the alkali-containing glass substrate (column 5, lines 47-56). It is also noted that Taga specifically discloses that ITO is electrically conductive (column 6, lines 32-36), therefore, an ITO layer can be considered an electrode film.

It is further noted that although Taga does not specifically disclose that the insulating layer (second layer 30) possesses the claimed surface electrical resistance of from 1.0×10^6 ohms/square to 1.0×10^{16} ohms/square even after heating process at 550 degrees C for 1 hour, Taga does disclose that layer may be a SiO_2 , TiO_2 , or Al_2O_3 film (column 3, lines 30-34 and column 6, lines 20-30) and that the film may have a thickness of 1000 angstroms (100 nm) (see Examples including Example 1). Considering that the current specification discloses that a 25 to 200 nm thick SiO_2 , TiO_2 , or Al_2O_3 film may be used as the insulating layer to obtain the claimed surface electrical resistance (see page 11, lines 6-13), and considering that the specification does

Art Unit: 1771

not teach or suggest that anything else is done to control the resistance of the film, it appears that the insulating film taught by Taga inherently possesses the claimed surface electrical resistance.

The Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977).

Regarding the claimed use of the glass substrate for a display, considering that the glass substrate taught by Taga is identical to the claimed glass substrate, it appears that the glass substrate taught by Taga is capable of performing the intended use. It is noted that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Regarding claim 10, Taga discloses that layers (20) may be ITO (indium doped tin oxide), In_2O_3 , or SnO_2 (column 3, lines 21-29 and column 6, lines 12-19).

Claim Rejections - 35 USC § 103

6. Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,124,026 to McCurdy et al. (hereinafter referred to as McCurdy) in view of USPN 5,811,923 to Zieba et al. (hereinafter referred to as Zieba).

Regarding claims 8 and 10, McCurdy discloses an article comprising an alkali-containing glass substrate, a barrier layer (corresponding to the claimed under layer) for preventing diffusion of alkali ions formed on a surface of the alkali-containing glass substrate, an absorbing coating (corresponding to the claimed barrier film) mainly formed of tin oxide deposited on the under layer, an SiO₂ film (corresponding to the claimed insulating film) deposited on the barrier film, and a conductive coating (corresponding to the claimed electrode film) (see entire document including column 3, lines 9-32 and column 4, lines 12-65).

McCurdy discloses that the conductive coating enables the article to dissipate static charges and that it “generally” is applied onto the absorbing coating prior to applying the SiO₂ film (column 4, lines 44-51). McCurdy does not specifically state that the conductive coating is to be deposited on the SiO₂ film (the exterior of the article), but Zieba discloses that it is known in the glass substrate static dissipating art to deposit a conductive coating on the exterior of an article to provide static discharge (see entire document including column 7, lines 8-22). It would have been obvious to one having ordinary skill in the art at the time the invention was made to deposit the conductive coating on the SiO₂ film (the exterior of the article), as taught by Zieba, because the exterior location is a viable alternative to the disclosed interior location and because it is within the general skill of a worker in the art to select a known location on the basis of its suitability.

It is noted that McCurdy specifically discloses that the barrier layer (corresponding to the claimed under layer) is capable of preventing diffusion of alkali ions formed on a surface of the alkali-containing glass substrate (column 4, lines 34-43). It is further noted that although McCurdy does not specifically disclose that the SiO₂ film (corresponding to the claimed insulating film) possesses the claimed surface electrical resistance of from 1.0×10^6 ohms/square to 1.0×10^{16} ohms/square even after heating process at 550 degrees C for 1 hour, McCurdy does disclose that the film may be a SiO₂ film with a thickness of about 700 angstroms (70 nm) (paragraph bridging columns 4 and 5). Considering that the current specification discloses that a 25 to 200 nm thick SiO₂ film may be used as the insulating layer to obtain the claimed surface electrical resistance (see page 11, lines 6-13), and considering that the specification does not teach or suggest that anything else is done to control the resistance of the film, it appears that the SiO₂ film taught by McCurdy inherently possesses the claimed surface electrical resistance.

Regarding the claimed use of the glass substrate for a display, considering that the glass substrate taught by the applied prior art is identical to the claimed glass substrate, it appears that the glass substrate taught by the applied prior art is capable of performing the intended use. It is noted that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Regarding claim 10, McCurdy discloses that the absorbing coating (corresponding to the claimed barrier film) may be mainly formed of tin oxide (column 3, lines 9-19).

Art Unit: 1771

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

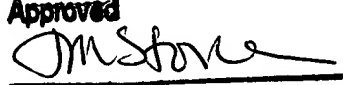
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

atp

gtp 2/2/05
ANDREW T. PIZIALI
PATENT EXAMINER


TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

Approved

Jacqueline M. Stone, Director
Technology Center 1700